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10/825,296	04/16/2004	Yeon-ho Jin	Q79989	7766

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EXAMINER	
GREENE, JOSEPH L	

ART UNIT	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/825,296	JIN ET AL.	
	Examiner	Art Unit	
	JOSEPH L. GREENE	2451	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 October 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-18* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-18* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1 – 18 are currently pending in this application.

2. Claims 1 and 14 amended as filed on 10/22/2008.

3. Claims 2-3, 5, 16, and 18 are previously presented as filed on 10/22/2008.

4. Claims 10-13 are canceled as filed on 10/22/2008.

Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 1-9 and 18 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

7. With respect to claim 1, it is directed to method for constructing a data structure but is done as such, that all of the steps can be carried out in a purely mental state. For example: a home state object could be created as someone visually collects a particular set of data (call it home state information) such as the brightness of the lights and etc. That person can then associate all of those settings as being a home state set and create them, mentally, as an object to

base all other calculations from. Pure mental steps are not one of the statutory categories of invention and thus, the claim is directed towards non-statutory subject matter.

8. Furthermore, claims 2-9 and 18 are dependent upon claim 1 and are thus, also rejected.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

10. Claims 1, 16, and 18 are rejected under 35 U.S.C. 102(e) as being anticipated by Gonzales et al. (Pre-Grant Publication No US 2003/0074088 A1) hereinafter Gonzales.

11. With respect to claim 1, Gonzales disclosed a method of constructing home-state information in a home network (abstract), comprising: a) constructing a home-state set using a plurality of home-state information sources which

expresses the home-state information sources and all the combinations of the home-state information sources ([0004], lines 1-6); b) constructing home-state objects which are specific instances of the home-state set ([0004], lines 1-6; [0010], lines 1-11); and c) constructing home-state properties expressing properties of the home-state objects which specify characteristic parts of home-state information sources ([0004], lines 1-6; [0010], lines 1-11; it is inherent that objects contain properties that allow another to interact with them). Wherein the constructed home-state set, home-state objects, and home-state properties comprise the constructed home-state information (0004, lines 1-6, where it is exactly the home-state information that is used to construct the aforementioned objects and set. I.e. the information of the light levels and etc.)

12. N/A

13. With respect to claim 16, Gonzales disclosed a system for utilizing home-state information, comprising: an information collecting module operable to collect information from various information sources in a network; a home-state generating module operable to process the collected information to generate home-state information; a home-state analyzing module operable to analyze the generated home-state information depending on home-state properties to produce analyzed information ([0004], lines 1-6; [0010], lines 1-11; where in order to provide the system's services, it needs to generate the information that

will provide the actual services); a home-state storing module operable to store the information generated by the home-state generating module and information analyzed by the home-state analyzing module in a computer-readable memory ([0010], lines 27-33); one or more applications in a computer-readable memory operable to control a predetermined home device using the generated home-state information or the analyzed information; and an Application Programming Interface (API) operable to transmit the information generated by the home-state generating module and the information analyzed by the home-state analyzing module to the applications, wherein the home-state storing module stores a set of information sources and the combinations of the information sources ([0010], lines 6-10).

14. As for claim 18, Gonzales taught all of the limitations described in claim 1, including the home-state information constructing method according to claim 1, wherein the home-state information sources include home devices, a home agent, home users, home services, and home applications (0004, lines 1-16).

Claim Rejections - 35 USC § 103

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

16. **Claims 2-9 and 17 are rejected as being unpatentable over Gonzales in view of Maxson et al. (Pre-Grant Publication No. US 2002/0171762 A1) hereinafter Maxson.**

17. As for claim 2, Gonzales taught all of the limitations described in claim 1, including wherein the home-state set comprises common home-state information sources (0010, lines 1-11, where the information sources are common to the SPI), but Gonzales did not explicitly state the use of profiles for the devices. However, Maxson does teach the use of profiles for the devices ([0054], lines 7-9, where the displayed devices in the menu means that the devices have profiles in the system). It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the teachings of Gonzales in order to utilize common profiles for information sources, as taught by Maxson, in order to have a properly functioning interface system that maintains representations of various devices.

18. As for claim 3, it is rejected on the same basis as claim 2. In addition, Maxson taught wherein operation a) comprises, a1) constructing unique profiles of the home-state information sources ([0054], lines 7-9, 17-20, and 28-32).

19. As for claim 4, it is rejected on the same basis as claim 3. In addition, Gonzales taught constructing external home service profiles ([0037], lines 13-15; [0038], lines 5-7), but Gonzales does not explicitly state wherein operation a1)

comprises, constructing home device profiles. However, Maxson does teach such a system ([0054], lines 7-9, 17-20, and 28-32). It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the teachings of Gonzales in order to utilize profiles of home devices, as taught by Maxson, in order to have a properly functioning interface system that maintains representations of the various home devices.

20. As for claim 5, it is rejected on the same basis as claim 2. In addition, Gonzales taught setting rules for information source objects which form profiles of the home-state information sources and a combination thereof, the rules being applied to a specific home-state object ([0004], lines 1-6).

21. As for claim 6, it is rejected on the same basis as claim 5. In addition, Gonzales taught wherein the rules are personally defined by a home user ([0010], lines 1-6).

22. As for claim 7, it is rejected on the same basis as claim 5. In addition, Gonzales taught wherein the rules are provided from an external home service provider ([0037], lines 13-15; [0038], lines 5-7).

23. As for claim 8, Gonzales taught all of the limitations described in claim 1, including the home-state set ([0004], lines 1-6), the home-state objects ([0004], lines 1-6; [0010], lines 1-11) and the home-state properties ([0004], lines 1-6;

[0010], lines 1-11; It is inherent that objects contain properties that allow another to interact with them, but Gonzales did not explicitly state combining a user interface with the home-state information. However, Maxson did teach such a system (abstract, lines 12-15). It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the teachings of Gonzales in order to utilize a user interface, as taught by Maxson, in order to accurately and efficiently manage a user interactive system.

24. As for claim 9, it is rejected for the same reason as claim 8. In addition, Gonzales taught combining an Application Programming Interface (API) with the home-state information to enable the constructed home-state information to be accessed from an external application ([0010], lines 6-10; the SPI mentioned in the prior art represents the API of the system).

25. N/A.

26. N/A.

27. As for claim 17, Gonzales taught all of the limitations described in claim 1. But Gonzales did not explicitly state wherein the one or more applications are constructed so that transmission or reception of home-state information there between is performed using Meta data for the information generated by the home-state generating module and the information analyzed by the home-state

analyzing module. However, Maxson does teach wherein the one or more applications are constructed so that transmission or reception of home-state information there between is performed using Meta data for the information generated by the home-state generating module and the information analyzed by the home-state analyzing module (0054, lines 28-32, where the reception of info is taking place by the user and the different states are metadata).

Both of these systems are solving the issue of creating a home network of devices and therefore it would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the teachings of Gonzales, in order to utilize metadata, as taught by Maxson, in order to improve the speed of transfer and overall ease of use of the system by increasing the speed at which important information is received.

28. Claims 14-15 are rejected as being unpatentable over Gonzales in view Maxson as applied to claims 10, and 11.

29. N/A.

30. With respect to claim 14, Gonzales taught all of the limitations described in claim 1, including collecting information from home-state information sources on a home network through an information collecting module; processing the collected information to generate home-state information including a home-state set expressing all combinations of the various information sources in the network

(0004, lines 1-6, where the explanation of this argument can be found in the response to arguments section with respect to the arguments against claims 1, 16, and 18); analyzing the generated home-state information to produce an event which specifies the generated home-state information; ([0004], lines 1-6; [0010], lines 1-11, where in order to provide the services, it will need to generate the information that will provide the actual services); and storing the generated home-state information in a computer-readable memory ([0010], lines 27-33), but Gonzales does not explicitly state using a home agent. However Maxson does teach using a home agent ([0008], lines 8-16; the mentioned PDCU is a device designed to collect and process information from other connected devices). It would have been obvious to person of ordinary skill in the art at the time of the invention to modify the teachings of Gonzales to combine a device collection and processing unit, as taught by Maxson, into ones system. Doing so increases the efficiency and modification ability of the system.

The combination of Gonzales and Maxson, however, does not teach announcing the event outside the home network. However, the examiner takes official notice that announcing an event outside of a home by analyzing the home-state information is well known and expected in the art in a common burglar alarm computer system. It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the teachings of Gonzales in order to combine event communicating practices found in many alarm systems in order to provide more features to event based computer system.

31. As for claim 15, it is rejected on the same basis as claim 14. In addition, the examiner takes official notice that announcing an event outside of a home by analyzing the home-state information is well known and expected in the art in a common burglar alarm computer system. It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the teachings of Gonzales in order to combine event communicating practices found in many alarm systems in order to provide more features to event based computer system.

Response to Arguments

32. Applicant's arguments filed 10/22/2008 have been fully considered but they are not persuasive.

33. With respect to claims 1 and 16, the applicant argues that "**Gonzales neither teaches nor suggests "a home-state set...which expresses...all the combinations of the home-state information sources" since Gonzales does not disclose constructing all possible scenes using all combinations of devices. Rather, Gonzales describes that a user creates unique scenes in which selected devices are adjusted to a desired state.**" However, section 0004, of the applicant's specification, shows that the system will include the different combinations of devices. For example: It can be seen that a scene allows the raising/lowering of particular elements within the particular scenes.

Thus the scene may be setup with as many or as few elements as desired. Furthermore, section 0114 expresses the multi-way group feature that more directly specifies the concept of having many combinations within a particular scene.

34. As for claim 18, the applicant argues that "**Gonzales neither teaches nor suggests ""wherein the home-state information sources include home devices, a home agent, home users, home services, and home applications,"" as recited in claim 18, since Gonzales does not disclose scenes based on states of home users. Indeed, Gonzales is merely directed to the programming of devices, but there is no teaching or suggestion that the state of a home user is included as an information source for a scene.**" However, Home user's states are taught. For example: a movie watching mode is one where the home users are watching a movie. Thus, the scene is set to movie watching. For the same reasoning, it can be seen in section 0004 that the user's information can be set to a similar scene under the same principles. i.e. a morning scene where the kitchen lights are set to 100% while everyone is eating.

35. With respect to claims 12, 14, and 15, the applicant argues that "**In the Office Action, the Examiner takes official notice that announcing an event outside of a home is common knowledge or well-known in the art. Applicants respectfully request the Examiner for evidence as to why such a feature is well-known. Applicants respectfully resubmit that the field of**

burglar alarm is an unrelated art to the field of home agents and home-state utilization. Burglar alarm systems merely transmit a signal when a breach is detected in a security system. Conversely, home agents and home-state analysis requires the detection of various different home-state information sources having various different properties." However, The definition of home state information in its broadest reasonable interpretation is information about a home state. With respect to the applicant's claimed invention, it is further directed to devices within that home that are providing home state information. Thus, the sensors that report information to the central controller of a burglar alarm are thus providing home state information. As requested, evidence is provided to show that the aforementioned teachings were well known in the art at the time of the invention (Kung et al. Patent No. US 6,826,173 B1, see column 40, lines 32-39).

Conclusion

36. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be

calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOSEPH L. GREENE whose telephone number is (571)270-3730. The examiner can normally be reached on Monday - Thursday from 9:00 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on (571) 272-3964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JLG

/John Follansbee/

Supervisory Patent Examiner, Art Unit 2451